STRATEGY RESEARCH PROJECT

CHANGES IN THE ARMY DENTAL CORPS: SUPPORTING TRANSFORMATION

BY

COLONEL RUSSELL J. CZERW
United States Army

USAWC CLASS OF 2002

U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050

USAWC STRATEGY RESEARCH PROJECT

Changes In The Army Dental Corps: Supporting Transformation

by

Colonel Russell J. Czerw
United States Army

Colonel Wayne Foxworth
Project Advisor

U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

ABSTRACT

AUTHOR: Russell J. Czerw

TITLE: Changes In The Army Dental Corps: Supporting Transformation

FORMAT: Strategy Research Project

DATE: 09 April 2002 PAGES: 36 CLASSIFICATION: Unclassified

The United States Army Transformation Campaign Plan describes a process through which part of The Army Vision can be implemented. Three essential elements of this Vision are people, readiness and transformation. The Army Dental Corps plays a vital role in caring for people and maintaining soldier readiness. It must have trained, competent dentists if it is to carry out its mission. Today, the Army Dental Corps faces a shortage of dental officers, especially junior officers and that shortage is likely to significantly increase within the next three years. If the Army Dental Corps is to continue to be an integral part of providing patient care, it must also undergo a transformation process. This paper will discuss current Army Dental Corps issues and propose changes to assist with maintaining a healthy Corps. Specific areas of transformation to be addressed include readiness, recruiting, retention, and graduate education.

TABLE OF CONTENTS

PREFACE

A part of this paper discusses mentorship as a vital tool necessary for recruiting and retention in the United States Army Dental Corps. One Army Officer that epitomizes the role of a mentor is Colonel Thomas S. Striano. His dedication to the officers that make up the Corps is one that should be emulated by all Military Officers. Therefore, this paper is dedicated to a truly inspirational, dedicated, proactive and dynamic Army Officer, Colonel Thomas S. Striano.

LIST OF TABLES

CHANGES IN THE ARMY DENTAL CORPS: SUPPORTING TRANSFORMATION

The United States Army Transformation Campaign Plan describes a process through which part of The Army Vision can be implemented. If done successfully, the Army should be able to better meet national security demands when called upon to do so in the future. Three essential elements of this Vision are people, readiness and transformation. One of the primary objectives for achieving success of this Vision, as outlined by the Chief of Staff of the Army, is to provide for the well being of soldiers, civilians and family members.[1] The Army Dental Corps plays a vital role in caring for people and maintaining soldier readiness. In order to carry out its mission, it must have competent dental officers that are trained in two professions, one as a military officer and the other as a dentist. Today, the Army Dental Corps faces a shortage of dental officers, especially junior officers, and that shortage is likely to significantly increase within the next three years. If the Army Dental Corps is to positively contribute to the tenants defined by General Shinseki and continue to be an integral part of providing patient care, it must also undergo a transformation process that will enable it to better meet the personnel demands in the future. This paper will discuss current Army Dental Corps issues and propose changes to assist with maintaining a healthy Army Dental Corps. Specific areas to be addressed include readiness, recruiting, retention, and graduate dental education.

The current Army Dental Corps' Vision as described by the Deputy Surgeon General, Chief of the Army Dental Corps, Major General Patrick Sculley, is to be the Army's dental care system of choice, focused on readiness, health promotion, improved health outcomes and exceeding customers' expectations.[2] It must be able to take care of soldiers at any place and at any time when called upon to do so. In order to accomplish this vision, it must have trained, competent dentists. If the Vision of the Army Dental Corps is to be fully implemented in order to assist with successfully meeting the objectives of Army Transformation and soldier readiness, the Army Dental Corps must do everything it can to access, retain and educate competent, well-trained dental officers.

BACKGROUND

In 1991, the Army Dental Corps had 1622 officers on active duty. In 2000, the end strength was 976 officers. Between 1991 and 2000, the number of specialists fell 29 percent, while the number of general dentists fell 54 percent. What is interesting to note is that only 68 of the 646 officers were forced to separate by selective early retirement boards in 1993 and

1994.[3] Even though the rest of the Army was in a draw down status during that period, the Army Dental Corps continued vigorous recruiting efforts that had less than stellar results.

The current budgeted end strength for Army dentists is 1138 officers. As of 1 January 2002, there were 982 dental officers on active duty, creating a shortfall of 156 dentists. Currently, 270 or 28 percent of the force has over 20 years of active federal commissioned service. Of those, 157 have no further active duty obligation after 30 September 2002. Based on the fact that these officers did not renegotiate or extend their dental officer multiyear retention bonus (DOMRB), an assumption could be made that many will retire in 2002 when their DOMRB contract expires. As of 1 January 2002, 39 of the 157 officers have already submitted their retirement paperwork. To further the problem of an aging Army Dental Corps, 43 percent of the total force will be retirement eligible within three years. [4]

As noted previously, a significant decrease in the general dentist population occurred since 1991. The greatest concern for shortages are with general dental officers (63As) and comprehensive general dental officers (63Bs). There is a shortage of 164 assignable 63As and 13 assignable 63Bs for a total deficit of 177 general dental officers. Currently there are 270 63Bs on active duty with 138 that have over 20 years of active service and of those, 77 could retire in 2002.[5] Considering inadequate recruiting, poor retention, a significant decline in the number of 63B training applicants, and that a large number of officers are retirement eligible, this matter warrants great concern.

READINESS

Dentistry is just one part of overall human wellness, but an essential one that requires the skills of a competent dentist. Maintaining the oral health of soldiers will have an overall positive effect on the Army and its soldiers by maximizing soldier readiness. The effort to maintain unit readiness occurs on several levels. The primary mission for the Table of Distribution and Allowance (TDA) or clinic based dental care providers is to maintain the oral health readiness of soldiers that are in garrison. The Modification Table of Organization and Equipment (MTOE) or forward deployed Army dentists, as well as the division and battalion dentists, have the responsibility to assist in sustaining the fighting force by providing quality dental care to soldiers in the field.

The current instrument used to determine the oral health status of a soldier is the dental fitness classification system. This system focuses on the force health protection of the armed forces and is used by all military services to measure an improvement or a decline in the oral health status of an individual soldier or unit. The classification system has four segments:

- Class 1 — patients do not require dental treatment or reevaluation within 12 months.
- Class 2 — patients who have oral conditions that, if not treated or followed up, have the potential but are not expected to result in dental emergencies within 12 months.
- Class 3 — patients have oral conditions that, if not treated, are expected to result in dental emergencies within 12 months.
- Class 4 — patients who require dental examinations or a panographic radiograph (X-ray).

(Note: Classes I and II are worldwide deployable; Classes III and IV are not.)

The Department of Defense (DOD) has established a goal of maintaining the combined Class 1 and 2 categories at a level of 95 percent for all military services.[6] Currently, the Class 1 and 2 rates for the Army are 22.8 and 69.4 percent, respectively, which is 2.8 percent short of the DOD goal.[7] Class 3 and 4 rates for the Army are 2.6 and 5.2 percent respectively.[8] The current classification system does have some drawbacks. For example, a soldier in need of a simple procedure such as a cleaning is placed into the Class 2 category. Another soldier that may need to have ten minor procedures accomplished may also be placed into the same category. The problem, however, is that at any time, many of the Class 2 individuals, especially those with multiple minor problems can relapse into a Class 3 state and become non-deployable. Therefore, even though a unit may have several Class 2 dentally fit soldiers, it is difficult to determine if the soldiers are a cleaning away from being a Class 1 patient or an abscess away from becoming a Class 3 patient.

To meet the oral health tenants of supporting Army transformation and improving readiness for the deployment of lighter, more agile units with less combat service support, the Chief of the Army Dental Corps as well as the other Service Dental Corps Chiefs have unofficially proposed that by 2008, each of the services meet a goal of maintaining Class 1 levels at 65 percent.[9] This goal, while having great intentions, will require a tremendous amount of monetary and personnel resources. It has been estimated that it will cost the Army in excess of eight million dollars and an increase of nearly eight hundred additional dental officers over the next six years to meet this goal.[10] Just as importantly, it will take a great deal of effort on behalf of all dental officers to change the mindset of line commanders. Today, most commanders understand that having soldiers in a Class 3 or 4 state is unacceptable and they appear willing to sacrifice the time a soldier spends away from the unit to receive treatment so that the soldier

will be deployment ready. To succeed in achieving a unit goal of 65 percent Class 1 soldiers, line officers will have to be willing to sacrifice even more of their soldiers' duty time. Increasing the number of appointments may cause other areas of a unit to fall below readiness levels due to decreased manpower. Dental commanders will have to work closely with and educate line commanders on the value of this new goal and help them to understand that the benefit to the unit will be realized at the time of deployment, when soldiers are dentally fit. Scheduling appointments during a unit down cycle, scheduling longer but fewer appointments, or evening appointments are just some starting places that could reduce the amount of time a soldier is absent. Liaisons should be appointed by each unit to coordinate with the dental personnel and facilitate appointment schedules. This increased level of coordination should allow a unit to gain a better handle on the unit's overall oral health status.

As discussed earlier, the Class 2 category can incorporate a wide range of clinical variations. Therefore, a study should be conducted to determine if it would be clinically significant to separate the Class 2 category into two sub categories. For instance, Class 2 patients could be separated into Class 2A and 2B. Class 2A would include an individual that tends more toward a Class 1 status and perhaps is in need of a cleaning and one minor restoration. Class 2B would be a patient that leans more toward the Class 3 category and is in need of more extensive treatment. By knowing what Class 2 patients have more disease prevalence, dental clinics could adjust treatment schedules more appropriately so that Class 2B patients could be placed in a higher priority and reduced to Class 2A or Class 1. This system would be especially useful during pre-deployment times.

Why is it so important to maintain a high level of oral wellness? Without proper oral care, a soldier could be a loss to a unit at the time of deployment, which could negatively affect the overall effectiveness of that unit. Without proper care, that soldier could find it difficult to eat, wear a protective mask or Kevlar helmet and could become ineffective. In a field environment or on a wartime mission, it might be necessary to evacuate that soldier to the rear, which would require other unit assets, including a vehicle and driver.

Many articles have been published annotating the various rates of disease and nonbattle injuries (DNBI) caused by medical problems on the battlefield. Dental disease and oral injuries can also cause DNBI and have been reported to range from 8 percent[11] to as high as 29.5 percent.[12] During the Vietnam conflict, 10 percent of hospital admissions that occurred involved facial injuries.[13] One of eight soldiers sought medical care for an oral complication.[14] A 1999 Department of Defense study reported that as many as 25 percent of mobilized reserve personnel could not be deployed until dental examinations and associative treatment were

completed.[15] A recent unpublished 2000 Tri-service recruit study showed that 36.9 percent of newly accessed soldiers were Class 3, indicating that there is still a large need for dental work to be completed to make recruits dentally fit.[16] What is interesting to note is that this number did not include those soldiers that needed third molars (wisdom teeth) extracted. If those soldiers were added in, the percentage increased to 44 percent.[17] A possible solution to this problem is to increase the dental manpower at training bases so soldiers could be rendered dentally fit before departing for their first duty station.

Having soldiers unavailable for a deployment or a mission, especially in a small, highly specific combat unit, could mean the difference between a unit's success and failure. It is the responsibility of the dental team, working in coordination with the unit command structure, to ensure oral readiness of all soldiers so that a mission is not compromised due to an oral health issue. However, without the cooperation from line commanders as well as an increase in the dental budget and personnel numbers, achieving the proposed goal of obtaining a 65 percent Class 1 rate will be difficult or impossible to meet.

RECRUITING

The recruiting goals for the Army Dental Corps have not been met for the past 15 years and this has created a large void of junior officers.[18] Junior officers are primarily assigned to provide care to front line soldiers. They are assigned to MTOE companies, divisions, main and forward support battalions and special forces units. It is imperative that the Army Dental Corps recruit more junior officers in order to properly staff these organizational units and maintain optimum readiness levels of the fighting soldier, especially if the United States Military expects to meet the new proposed readiness goals.

In the 1980s, the primary accession-recruiting tool was a one-year advanced general dentistry residency and the chance for a recent dental school graduate to participate in this outstanding program. These programs provided a graduate an opportunity to improve their clinical skills, become more proficient, and learn new techniques. Another incentive for joining the military was the economic situation of the time. Interest rates on loans were high which made it somewhat cost prohibitive for dental school graduates to start a private practice right out of dental school without increasing their debt. In the mid 1990s, a $30,000 accession bonus was used as a monetary incentive to access graduates but this had limited success as a recruiting tool for the Army. The predominant monetary incentive used successfully in the late 1990s was the Armed Forces Health Professions Scholarship Program. This program is still used extensively today. However, there are not enough scholarships to fulfill the personnel

requirements and therefore the Dental Corps must recruit direct accessions. Recruiting dental officers continues to be a difficult mission and there are various reasons for this. One reason can be attributed to graduates leaving dental school with a large debt and the inability to make enough money in the military to comfortably pay off their loans. Another can be attributed to the decrease in the number of overall dental school graduates from which to recruit.

Tuition and fees of a dental school education have risen 75 percent in the past seven years, while actual costs to the dental school have risen even more sharply.[19] The average debt of a graduate of dental school in 1999 was $99,608.[20] This amount translates into a payment of over $1000 per month for several years, which can be a substantial amount of the monthly income of a captain in the military. A recent study indicated that 25 percent of graduates reported debt levels between $100,000 and $149,000 while 22 percent reported a debt level greater than $150,000.[21]

Prior to 1 July 1993, when health professionals entered the military, school loans could be deferred for a period of up to three years. After that date, loans were no longer deferrable and loan payments were due upon graduation. Being able to defer loans for at least three years gave a junior officer the ability to have access to some extra discretionary money during a time when career compensation was the lowest. The military should make every legal effort to seek reinstatement for loan deferments. Getting support from the lobbyists of the American Dental Association as well as the American Medical Association would be a good starting point. The deferments should remain in effect until the first active duty obligation expires or at a minimum, for the first three years of active duty military service.

To compound the problem of not being able to defer a loan, the interest on the loans, which can be as much as $7,000 to $8,000 per year, started to accrue immediately after graduation. In 1997, a tax bill was passed that phased-in deduction for interest paid on qualified education loans that (1) only assisted those individuals whose modified adjusted gross income is under $55,000 a year (under $75,000 in the case of a joint return); (2) limited the tax deduction to $2,500 and (3) was applied only for the first five years of the loan repayment.[22] The changes in the law in 1997 helped some graduates but not all. In order to assist more students, there is current legislation pending that would allow students that have a significantly higher modified gross income, the ability to deduct the total interest paid on student loans from their individual tax returns. If passed, this could have a positive impact on recruiting efforts, because graduates will be able to use the deduction to reduce their financial burden during the early years of a military career when it is needed the most.

The number of dental school graduates that the military services have to recruit from is decreasing. Since 1986, seven dental schools in the United States have closed.[23] In 1997 there were approximately 1000 fewer graduates available to recruit than there were in 1986. To compound this problem, not only do the three military services have to recruit from fewer graduates, other governmental agencies must draw from this same decreasing population. To add further strain on this system, dental schools are trying to recruit graduates to become faculty members, as there is a significant need for dental school professors. Currently, there are nearly 400 faculty positions that remain unfilled throughout schools in the United States.[24]

Another problem facing recruiting efforts is that the percentage of female dentists grew from 1 percent in 1972 to 36 percent in 1995 and is projected to increase to 38 percent or higher in 2005.[25] The female population recruited into the Army Dental Corps has decreased from 26 percent to 25 percent to 18 percent for years 1998, 1999, 2000, respectively.[26] Therefore, if the Army Dental Corps is to maintain the appropriate numbers that are necessary to complete its mission, it must not only focus on recruiting more men from an overall decreasing graduating population, but it must find ways to attract more women into the Army.

A recruiting tool that the Army should consider implementing and utilizing is a program that focuses on early recruiting in dental schools. It is imperative that the Dental Corps send selected dental officers back to schools on recruiting missions in order to talk with all dental students as early as their freshman year. Specifically, officers should be sent back to their alma mater to visit and speak with these potential applicants. Standing in front of impressionable students, in uniform, telling them about their positive experiences, should get some students thinking about entering active duty through an early entry program or Armed Forces Health Professions Scholarship Program. A proactive, specific program, with a set agenda, including slides and handouts that detail a career in the Army Dental Corps, must accompany the recruiting dentist. A specific advertising plan as well as a formal brief would serve as an important tool in order to assemble a mass. Specific programs to include the military retirement pension after twenty years of service, health benefits, the new thrift savings plan program as an additional retirement plan, graduate level educational opportunities, one fully funded dental education meeting a year plus several other opportunities to get continuing education credit, as well as all other benefits available to service members, should be explained in detail.

An accurate list of dental personnel must be provided to students to assist with this process. These points of contact must be knowledgeable about military dentistry and have a willingness to speak with potential recruits. This will allow students the opportunity to ask follow

up questions and have them answered in a timely fashion so that they do not become disenchanted with the military or become more focused on getting into a civilian practice.

For years, the recruiting efforts have been left up the Medical Service Corps Recruiting Officers. They have done an admirable job, but given their demanding task of recruiting for all six Army Medical Department Corps, assisting them in their recruiting task should help to increase the number of Dental Corps accessions. Although many of the recruiters are extremely knowledgeable and can answer specific questions about the military in general, only a dental officer can provide first hand information about typical clinical experiences and practice opportunities that a dentist will face. Again, getting to these students as early as possible in their freshman year is extremely important, because by the time they are juniors and seniors, they have already begun planning their life after dental school and the chance of changing their mind diminishes. From a personal experience, this type of program can provide very positive assistance in increasing the success of recruiting efforts. In 1987, from just two such trips that were taken to talk with potential applicants, four officers joined the military that had no previous intention of doing so.

Significant numbers of retired military dental officers, because they are specialty trained, board certified and have experience in teaching, are heavily recruited to teach in American Dental Schools. These individuals are a crucial source for recruiting students and can be an invaluable tool to increasing recruiting efforts. An organized and monitored system that is coordinated with Army Personnel Command (PERSCOM), as well as with the Dental Corps recruiting liaison contractor in San Antonio, Texas, must be established. This will allow the latest information about the Army Dental Corps to be sent out to these retired Army officers on a frequent basis. These retired officers have significant influence on dental students and therefore could become an important informational source and improve recruiting efforts by their involvement.

A recruiting tool that has been available in the past is a direct accession bonus in the amount of $30,000. New accessions are eligible for this bonus if they have not received any other subsidization from the military. They must also agree to a four-year active duty obligation. This accession bonus has not had a significant positive effect on Army Dental Corps recruiting efforts. Given the fact that this bonus is taxable income, the amount realized by an officer with a four-year obligation is approximately $5500 per year. If an accession bonus is to be offered, a study should be conducted to determine the correct amount that is necessary to increase the impact on recruiting. If that amount becomes too great, then the program should be

discontinued and the money placed toward alternative efforts such as the Armed Forces Health Professions Scholarship Program.

The Armed Forces Health Professions Scholarship Program has been the one recruiting tool that has kept the Army Dental Corps afloat in recent years. This program has accounted for approximately 95 percent of the officer accessions since 1997.[27] Current allocations have been fully funded in the Program Objective Memorandum from FY03 to FY07.[28] This will allow the Army Dental Corps to access about 95 of the required 128-officer accession goal per year. It is a vital program because it commits a dental student to the Army after graduation. The downside is that a student is given a four-year scholarship before spending one day in dental school and if that student falls out of enrollment or turns out to be a sub par performer, the Dental Corps will lose that individual. However, to date, this has not been a problem. It is imperative that this program continues to be fully funded by the Army. Efforts should be made to increase Army funding in order to increase scholarships and thereby increase accessions. All three military services must make every effort to see that this is accomplished as soon as possible.

RETENTION

Not only is the Army Dental Corps having trouble recruiting quality dentists, it is also facing retention problems that could get worse. According to DOD studies, in 1985, military dentists served an average 12.4 years.[29] In 1996, the expected length of service dropped to 7.4 years.[30] After twenty-four months on active duty, dental corps officers go before a Voluntary Indefinite (VI) board. This selection board determines if an officer will be allowed to remain on active duty once they complete their active duty service obligation. Normal selection rates are close to 100 percent. Even though most officers are offered the chance to continue on active duty, many decline the invitation once their initial obligation has expired. This is evidenced by a significant decrease in VI acceptance rates of 58 percent, 50 percent, and 37 percent for years 98, 99, and 00, respectively.[31]

Many research articles have been written over the years detailing the theory of why humans make the decisions they do and act the way they do. The motivation behind these actions have also been studied. One such researcher, Abraham Maslow, wrote about the hierarchy of individual needs and his contention is that there are certain basic needs that are common to all people to include psychological requirements, safety, love and belonging, self esteem and self actualization.[32] He states that these needs usually flow in the order presented but can vary in order from person to person and within a individual.[33] Security, protection,

stability as well as the need for structure and order are incorporated under the need for safety.[34] Individuals seek refuge from the environment by obtaining shelter, warmth in the form of protective clothing, and a means of defending themselves or providing security and protection for those that are close to them.[35] Today, individuals in society seek shelter in the form of renting or buying a house, buying and wearing various types of protective clothing, and purchasing items for self protection to include alarm systems on houses and cars, guns, mace and participating in self-defense classes. In order to accomplish these security protective measures, an individual must have a form of compensation to pay for these goods and services. Therefore, monetary compensation can be closely related to security needs.

Various researchers to include Adams have also written about the impact of perceived inequitable and less than satisfying work conditions.[36] Many times individuals determine self-actualization by comparing what they possess and the effort it took to achieve what they have, with others that hold comparable positions in society. In the case of the military, soldiers tend to compare what they do and have with their civilian counterparts. This is apparent in today's society, at least from the perspective of someone who worked in personnel assignments for over five years. Many times individuals, at first, will accept a new assignment with a fairly positive attitude. However, this attitude turns negative very quickly when that individual finds out that another officer was assigned to that individual's first choice. It is almost inevitable that the first officer believes that he or she was a better selection, more qualified and deserving than the officer assigned and that perhaps the other officer is more favored by the personnel branch.

Another area that officers feel they are being "cheated" on is in the area of direct compensation; i.e. the pay they receive is not comparable to that of the civilian sector. To understand this concept, compensation must first be defined:

> "The compensation process is directed toward the remunerating people for services performed and motivating them to attain desired levels of performance. Among the components of this process are wage salary payments; the awarding of other cost items such as insurance, vacations, and sick leave; and the provision of the essentially no cost rewards such as recognition, privileges, and symbols of status."[37]

Timm and others have written about examples of perceived inequity and note five ways individuals will respond: endurance, demands for compensation, retaliation, rationalization, and withdrawal from the inequitable situation.[38]

The principles of Maslow and Timm and the concept of direct meaningful compensation can be related to the Army Dental Corps. Today's junior dental officer is very inquisitive and rather direct and forward in conversations he or she has with more senior officers. As the Chief,

Dental Corps Branch, PERSCOM, I had several discussions with junior officers, and it was very apparent that their expectation for compensation and wealth accumulation was immediate and not in twenty years. They are very aware of the compensation differences between military and civilian practices. Time after time, they expressed a sense of envy for classmates that were in private practice that were extremely successful, had many luxury items and were looked up to in their community. Dentistry is a valued profession as evidenced by a 1997 Gallup Poll that ranked dentistry as the fifth most trusted profession in America.[39] Many officers feel they work just as hard, if not harder, than their civilian counterparts, work longer hours, sacrifice more in family time because of deployments, and cause an instability in family life because of the constant permanent change of station moves. They also feel they do not receive the same compensational rewards as civilian clinicians. While dental officers work a minimum of 40 hours per week, the average civilian dentist works 37.0 hours per week.[40] These junior officers also know that private practice can be successful and according to Inc. magazine, dental offices were the third highest-ranking category of start-up businesses likely to survive.[41]

It is fairly apparent that the desire for immediate security and open-ended compensation is a major cause of young officers wanting to leave the military in search of private practice. In personal conversations with junior officers, one recurring, consistent theme is that they "can not afford" to stay in the military with the debt they have accumulated from dental school. When questioned as to whether they would have joined the military if given the opportunity again, even though most said they enjoyed the experience, for financial reasons, they doubted they would have.

There are several complicating factors that influence personnel retention rates to include a long period of a strong United States economy, increased opportunities in civilian dentistry, an increase in disparity between civilian dental pay and military pay, increased family moves as well as an increase in operation tempo.

During the time of economic prosperity, people are more likely to spend money on those things that were once considered purely an elective procedure, such as esthetic crowns, tooth whitening procedures and orthodontic treatment. The profession of dentistry is currently in one of those times when private practice can be very lucrative and many opportunities for a dentist to build a very successful practice are available. This has led to a significant disparity between military and civilian pay. Given the fact there has been a decrease in the number of dental graduates nation wide and that a large number of dentists are expected to retire in the near future, job prospects for civilian practices will be good.[42]

The current pay for a dental officer is based on the following: Monthly Basic Pay, Basic Allowance for Subsistence (BAS), Basic Allowance for Housing (BAH), Variable Special Pay (VSP), Dental Additional Special Pay (DASP). The income of a junior military general dentist in the first year and fifth year of service, providing they sign a Dental Additional Special Pay (DASP) contract which adds a one year obligation, is approximately $52,000 and $69,500 respectively. The breakdown in pay is displayed in Table 1.

2002 Pay Rates	1 Year CPT	5 Year CPT
BASE PAY	$2,797	$3,699
BAS	$166	$166
BAH/w dependents	$763	$763
VSP	$250	$583
Total per month	$3,976	$5,211
Subtotal per year	$47,710	$62,536
DASP	$4,000	$7,000
TOTAL PER YEAR	$51,710	$69,536

TABLE 1

The VSP and DASP are based upon years of creditable service. Two other special pays available to dental officers are Board Certification Pay (BSP), only available to an officer that successfully completed board certification after specialty training, and Dental Officer Multiyear Retention Bonus (DOMRB), only available to those specialty trained officers that have completed eight years of creditable service. Typically, a dental officer will complete the requirements to become eligible for the BSP and DOMRB at about the ten-year mark. Table 2 provides a list of Dental Special Pays.

Years of Service	VSP Annual	DASP Annual	Years of Service	BCP Annual
Internship	$3,000	$4,000	Internship	N/A
Less Than 3 Years	$3,000	$4,000	Less Than 3 Years	$2,500
3 But Less Than 8	$7,000	$6,000	3 But Less Than 6	$2,500
8 But Lees Than 10	$12,000	$6,000	6 But Lees Than 10	$2,500
10 But Lees Than 12	$12,000	$15,000	10 But Lees Than 12	$3,500
12 But Lees Than 14	$10,000	$15,000	12 But Lees Than 14	$4,000
14 But Lees Than 18	$9,000	$15,000	14 But Lees Than 18	$5,000
18 or More Years	$8,000	$15,000	18 or More Years	$6,000
Grade O7 & Above	$7,000	$15,000	Grade O7 & Above	$6,000

TABLE 2

The ADA reports that due to a poor sampling response at the national level, accurate information of annual income of a new dentist cannot be determined.[43] However, the average salary for a civilian general dentist in private practice in 1999 was $158,080.[44] If this rate was adjusted by using a 4.5 percent increase per year, the equivalent in 2001 dollars would approximate $172,627.

The current Army Dental Corps Chief has strategically focused on military pay in the last two years and has made it one of his top priorities. The issue has received significant attention in the Department of Defense for all health care providers, so much so that the Center of Naval Analysis (CNA) was commissioned to conduct a study to measure the adequacy of special pays and bonuses for all military health professionals. The results of this on-going study should show the disparity between military and civilian pay. There is strong belief and hope that because of this pay disparity, CNA will thereby recommend that special bonuses to include the VSP, DASP, BCP and the DOMRB be adjusted accordingly. If done, there is strong likelihood that a significant number of junior officers will remain on active duty past their active duty service obligation. Just as importantly, it may persuade many of the senior officers, that are nearing retirement or are already retirement eligible, to remain on active duty until more juniors officers can be accessed onto active duty.

The military services are taking the first step in addressing the situation with the CNA study. However, with the current weakness in Dental Corps numbers being within the junior officer ranks, a stopgap increase pay package should be considered for this group. One consideration is to increase the Dental VSP for those with less than four years to $8,000 from $3,000 and those with four to eight years should receive an increase to $16,000. A serious

effort must be made to keep officers that are near retirement or retirement eligible so that a sustainable force can remain in place until accession numbers improve. Officers with more than nine years should receive an increase of VSP to $18,000. The VSP is an entitlement and does not require new legislation, but only an adjustment to existing legislation. It is an incentive pay that is not lost while officers are in a residency program. Another way to close the pay gap between military and civilian pay is to increase all present DASP rates by $15,000. This pay also just needs an adjustment to current legislation but unlike the VSP, cannot be received while participating in a residency program.

There has also been discussion of instituting a Health Professional Loan Repayment Program. This program can be used as a retention tool for those officers that have completed their initial obligation and are at their first stay-leave military decision. A four-year contract could be established and allowances made to pay off a large part of student loans in order to keep these junior officers to the critical eight-year mark. Recruiting in this manner, from an inventory that understands and knows the military system, is perhaps the best way to recruit officers. Historical numbers show that most officers will leave the Army Dental Corps before the eight-year mark. After that time, the number of officers leaving the service declines and remains steady through the out years. By keeping officers to the eight-year mark, the chances increase that they will apply for graduate level training, which will put them over ten years of service, and in all likelihood make them more apt to stay for a twenty-year career.

Another way to potentially improve retention for those areas of concentration (AOC) that are below readiness levels is to offer other signing bonuses. One such bonus being offered Army wide is the Critical Skills Retention Bonus (CSRB). This bonus could be extremely beneficial for use in increasing and retaining dentists in AOCs in all services that are short officers, specifically oral surgeons and specialty trained comprehensive dentists. It is apparent that bonuses, such as the DOMRB, do work and are an important tool in retaining officers. This is evidenced by the fact that in 1999, the Army had had 76 percent of eligible Army dentists accept the DOMRB.[45]

All special pays are taxed and 28 percent of the total amount is withheld at distribution. It is recommended that a study be done on all special pays for all military members to determine the impact to the Federal Reserve if these pays became tax exempt. Making them tax exempt would certainly help reduce the disparity between military and civilian pay, not only in the military health arena, but for all military occupations as well.

Finally, in the future, statutory and discretionary pays should be reviewed every three years. This will allow for adjustments in pay so that inflationary differences between military and civilian pays are kept in check.

Increasing military pay will not by itself retain all the officers needed in order for the Army Dental Corps to complete its mission. The Army Dental Corps must also focus on other concerns such as the assignment process and operation tempo. Assignment officers must do their best to accommodate the needs of the Army while taking into consideration officers' assignment requests. They must continue the recent policy of keeping officers in place, if they so desire and the mission warrants, for a period of at least four years. In the past few years, the Army Dental Corps informally tried to keep officers that had a senior in high school in a stable assignment. Now that this is a PERSCOM policy, the Corps should continue to make every effort to adhere to this practice. Officers must be carefully managed so that they are not being assigned to consecutive units where operation tempos and family separations are increased.

The decline in the numbers of junior general dentists is having a negative impact that can be seen among junior and senior officers. Because fewer junior officers are available for assignments, especially in deployable field units and units overseas, the number of station moves as well the operation tempo has significantly increased for them. Senior officers are frequently utilized to fill positions that were once filled by junior officers and this has led to a negative impact on that group. It is very important that the Army try to retain as many senior dental officers as possible until an increase in the numbers of junior and mid-grade officers is achieved. It is this group that is relied heavily on to run graduate education programs, command at senior level positions and function as senior staff officers in key positions.

Another important aspect to consider for increasing retention is the positive influence that senior leaders can and should have on junior officers in the form of a mentorship program. It is imperative that senior leaders take an active role in counseling and guiding soldiers throughout their career. A mutual, reciprocal mentor/mentee relationship should be established. This relationship needs to be nurtured by the senior leader to its fullest extent. From a personal experience, one of the best available retention tools is a senior leader who is willing to give of him or herself and pass on vital knowledge and positive experiences to the future leaders of the Army Dental Corps.

EDUCATION

The military services provide some of the best postgraduate training opportunities that are available in the world today and should utilize these programs to increase recruiting efforts.

Dentistry in the Army is made up of several specialties to include ten areas of concentrations (AOCs) and each is vital for providing comprehensive dental care for patients. Dental Corps officers have the opportunity to become board certified in their specialty while on active duty. Board certification in any health care occupation is seen as being recognized as an expert in that field of health care and is normally a prerequisite for positions of higher education. In the Army today, 72 percent of eligible specialty-trained officers are board certified.[46] No specific details are available on the total percentage of civilian specialties that have certification but some example comparisons exist. For instance, 58 percent of the Army endodontists are board certified compared to 14 percent of civilian endodontists.[47,48] Army prosthodontists are certified at a rate of 60 percent while civilian counterpart certify at a rate of 30 percent.[49,50] It is apparent that one benefit of Army dentistry is the availability of obtaining board certification.

The two primary "go to war" specialties in the Army Dental Corps today are the general dentists and the oral surgeons (63N). The general dentists are broken up into two categories: the general dentist (63A) and the specialty trained comprehensive dentist (63B). 63As are also split into two groups. A dental officer that access directly into the Corps without going into a one-year training program is classified as a 6300. They are generally sent to larger clinics to perform routine care on patients to include fillings, simple root canals and extractions. They normally work under the guidance of a more senior officer and refer more complex cases. Those officers completing a one-year program are classified as a 63A9D.and are assigned to more remote areas and are able to treat more complex cases than a 63A00. A 63B completes an extensive two-year program that trains them on all aspects of dentistry. Once completing the training program, these officers are capable of completing all aspects of dentistry to a higher degree than a general dentist. They are assigned to smaller clinics where they perform all but the most complex procedures on their patients. Because of their wide range of skills, 63Bs are an extremely valuable asset to Army dentistry. Having comprehensive dentists on active duty to provide such varied care allows the Army to keep a minimal number of classical specialists on active duty. However, the numbers of these type of providers is reaching a critical state. There are 230 63B authorizations and there are currently 218 officers available to fill these positions.[51] What is more alarming is that over 50 percent of these 63Bs will be retirement eligible in 2002.[52] This result could have a significant negative impact on keeping soldier readiness to the suggested level in the future.

The 63B program, once unique to the military, has been emulated by a very few civilian schools. Civilian schools accept students right out of dental school into the program. In order to take advantage of a larger population from which to recruit, the military needs to change the

current thinking of when and where 63Bs are trained. According to the AMEDD Personnel Proponent Directorate Model, nineteen 63Bs per year need to be trained to meet the necessary end strength.[53] There are currently six officers in a training programs that have the capacity to train twelve. The training facilities are located at Fort Bragg, North Carolina and Fort Hood, Texas.

Reasons for officers not applying for this program are varied. For one, in the civilian sector, no general dentist can claim that they hold any degree or specialty designation after completing the two-year program, even though they can complete board certification by passing the American Board of General Dentistry examination. This certification has not been recognized by the ADA as being equal to board certification in a classical specialty. Therefore, even though a dentist obtains a great deal of clinical and didactic knowledge from the residency, they are not allowed to advertise this qualification to a patient in a way that indicates they are superior to or more proficient than any other general dentist. Therefore, not many civilian dentists enter this program. In the military, even though board certification leads to an increase in pay and significantly increases the chance for promotion to colonel, many officers feel that the credentials, which are difficult to obtain, will not give them any additional status in the civilian sector should they decide to leave the military. Another reason for the lack of applicants is due to the training locations. Officers belonging to an older, still eligible year group, indicate that they would consider applying for a residency program but had no desire to complete the program at either of the two current available sites.

There are possible solutions for the 63B problem but they are multifaceted. The Army currently trains officers as comprehensive dentists only after they have been on active duty for 24-36 months. It is imperative that these programs be used as a recruiting tool and made available to graduating dental students. This would allow students the opportunity to be trained as a 63B right out of school. Being trained early will allow junior officers to receive board specialty pay earlier and will certainly improve their chances for promotion to senior ranks of the Army. A change in this policy should also induce more students to enter military dentistry because they would not have to wait two to three years to compete for a residency program.

It has been a policy of the Army not to dual train officers in a second specialty. Many junior officers want to participate in graduate level training but desire training in a classical specialty, such as orthodontics or endodontics. However, the competition for this type of training is great. In the past, once an officer completed a specialty-training program, he or she was prohibited from training in another specialty; therefore, officers that ultimately wanted to be a classical specialist did not apply for the 63B program. After much research and deliberation,

the Army recently (December 2001) made the commitment to allow officers the opportunity to retrain in a classical specialty once they obtain board certification and serve as a 63B for five years. By making dual training available, junior officers can get immediate training as a 63B and still have the possibility to retrain in another classical specialty in the future. This change in policy should increase the number of officers applying for training as a 63B. It is strongly recommended that the Army continue the dual training concept in the future.

There are currently nine one-year Army residency-training programs available for recent graduates of dental schools. These residency programs significantly increase the skills of a new dental graduate. The programs are located at various installations around the United States as well as in Hawaii and Germany. Recent board results for the one-year program indicated that 71 percent of the dental school graduates selected for the program requested either Hawaii, Fort Lewis or Fort Carson as their the first choice for a training assignment.[54] These three assignments are also the most requested assignments made by Dental Corps officers today.

As a way to encourage more officers to complete the 63B residency program, the Dental Corps should turn the one-year programs at these three installations into two-year programs, as it would be extremely prudent, and physically and structurally possible to accomplish. Officers currently completing the one-year program at these installations would be allowed to continue on for an additional year and receive the 63B designator. The change in location should also encourage more senior officers to apply for 63B training.

This policy change would decrease the 63A9D population near-term by thirty but overall it would provide many benefits. It would make available the necessary physical facilities to train the required nineteen 63Bs. Many graduates accessed into the Army choose an assignment based upon location of the installation because they generally know where a base is located but little about the function of the installation. By decreasing the number of one-year residents, the Dental Corps could assign officers not selected for a residency to a location closer to their assignment choice. At these facilities they could assist with soldier readiness under the guidance of a more senior dental officer while improving their clinical skills and dental knowledge. They could also undergo clinical rotations that could be set up so that they could gain more experience and increase their depth and breath of clinical cases. A properly run residency program takes a great deal of personnel assets. By removing two programs, one at Fort Hood and one at Fort Bragg, many dentists involved in these programs could be freed up to provide clinical dentistry to soldiers at these large installations.

CONCLUSION

The United States Army Dental Corps plays an important role in maintaining soldier readiness by maintaining the dental health and oral fitness of Army soldiers. Providing clinical examinations, applying preventive measures, restoring defective lesions and eliminating pain from dental disease, will allow soldiers to concentrate on their essential tasks rather than on an oral problem and will help create a more healthy force. If the Army Dental Corps is to carry out its mission and assist with Army Transformation, it must have the appropriate number of trained, competent, dental officers. Only through increased efforts of better recruiting, retention and increased educational opportunities, will the Army Dental Corps be able to sustain a viable and ready force and assist the Army with rigorous demands of meeting our national security needs.

WORD COUNT = 8,309

ENDNOTES

[1] "Intent of the Chief of Staff, Army, 1999," In U.S Army War College, Core Curriculum Course I: Strategic Leadership: Readings: Volume II, Academic Year 2002 (Carlisle Barracks: U.S. Army War College, 2001), 145.

[2] Patrick D. Sculley, "Strategic Planning," available from <http://www.dencom.army.mil>; Internet; accessed 25 September 2001.

[3] Department of the Army (PERSCOM), Officer Master File Data, 30 September 2001.

[4] Ibid.

[5] Ibid.

[6] U.S. Department of Defense, Health Affairs, Policies on Uniformity of Dental Classification System, Frequency of Periodic Dental Examinations, Active Duty Overseas Screening, and Dental Deployment Standards. Policy 98-021. Washington: 19 February 1998.

[7] Department of the Army (DENCOM), CDA Data, 10 January 2002.

[8] Ibid.

[9] Lieutenant Colonel Bruce Brehm, Office of the Surgeon General Staff, Washington, D.C., Interview by author over telephone, 15 January 2002.

[10] Ibid.

[11] The Joint Chiefs of Staff, Doctrine for Health Service Support in Joint Operations, Joint Publication 4-02, (Washington, D.C.: United States Government Printing Office, 26 April 1995) II-11.

[12] JE King and Brunner DG, "Theater of Operations Dental Work Load Estimation", (U.S. Army Health Care Studies and Clinical Investigation Activity, Final Dental Report #84-001, Fort Sam Houston, Texas, May 1984).

[13] Ibid.

[14] Richard D. Shipley, "Dental Corps Structure: Past, Present, and Future", (U.S. Army War College Military Studies Program Paper, AD-A 265 095, 1 April 1993), 4.

[15] American Dental Association, Military and Federal Dentistry, available from <http://www.ada.org/prof/govt/dentistryworks/milfed.html>; Internet; accessed 1 November 2001.

[16] Major Jeffery Chaffin, DENCOM Staff, Fort Sam Houston, Texas, Interview by author over telephone, 15 January 2002.

[17] Ibid.

[18] Department of the Army (PERSCOM), Officer Master File Data, 30 September 2001.

[19] Fox K, "Aging Institutions," American Dental Association News 2001:32(17):12.

[20] American Dental Educational Association Fact Sheet, available from <http://www.adea.org/legislative_affairs/congressional_kit/DentEd%20Fact%20Sheet.htm>; Internet; accessed 1 November 2001.

[21] Ibid.

[22] American Medical Association: "Tax Deductions for All Student Loan Borrowers" (HR 436/S 152), available from <http://www.ama-assn.org/ama/pub/article/4044-3976.html>; Internet; accessed 1 November 2001.

[23] Fox, "Aging Institutions," 12.

[24] Ibid.

[25] Brown LJ, Lazar V. "Trends in the Dental Health Work Force," Journal of the American Dental Association 1999; 130:1747.

[26] Department of the Army (PERSCOM), Officer Master File Data, 30 September 2001.

[27] Ibid.

[28] Lieutenant Colonel Bruce Brehm, Office of the Surgeon General Staff, Washington, D.C., Interview by author over telephone, 15 January 2002.

[29] Department of Defense (Health Affairs), Military Dentists Special Pay Study, February 1997,6.

[30] Ibid.

[31] Department of the Army (PERSCOM), Officer Master File Data, 30 September 2001.

[32] Abraham H. Maslow, Motivation and Personality (New York: Harper and Rowe, 1970), 35-47.

[33] Ibid.

[34] Ibid.

[35] Wendell L. French, The Personnel Management Process, (Boston: Houghton Mifflin Company, 1987), 84.

[36] Adams, JS, "Toward an Understanding of Inequity," Journal of Abnormal and Social Psychology, 67(5), 422-436.

[37] Ibid, 417.

[38] Ibid, 132.

[39] ADA survey Center: "Frequently Asked Questions," available from <http://www.ada.org/prof/prac/issues/survey/faq/faq.html>; Internet; accessed 1 November 2001.

[40] Ibid.

[41] Ibid.

[42] Occupational Outlook Handbook available from <http://www.bls.gov/oco/ocos072.htm>; Internet; accessed 3 January 2002.

[43] ADA Survey Center: "Frequently Asked Questions."

[44] Ibid.

[45] Department of the Army (PERSCOM), Officer Master File Data, 30 November 2001.

[46] Ibid.

[47] Ibid.

[48] The University of Iowa College of Dentistry: "Frequently Asked Questions about Prosthodontics," available from <http://www.dentistry.vh.org/Prothodonics/faqprost.html Internet>; accessed 10 December 2001.

[49] Department of the Army (PERSCOM), Officer Master File Data, 30 November 2001.

[50] Minneapolis Saint Paul Magazine: "Brace Yourself," available from <http://www.mspmag.com/feature.asp?featureID=2120>; Internet; accessed 10 December 2001.

[51] Department of the Army (PERSCOM), Officer Master File Data, 30 November 2001.

[52] Ibid.

[53] Lieutenant Colonel Art Scott, AMEDD Personnel Proponent Directorate. Interview by author over telephone, 20 April 2001.

[54] Department of the Army (PERSCOM), Officer Master File Data, 30 November 2001.

BIBLIOGRAPHY

"Intent of the Chief of Staff, Army, 1999," In U.S Army War College, Core Curriculum Course I: Strategic Leadership: Readings: Volume II, Academic Year 2002. Carlisle Barracks: U.S. Army War College, 2001

"Occupational Outlook Handbook," available from <http://www.bls.gov/oco/ocos072.htm>; Internet; accessed 3 January 2002.

Adams, JS, "Toward an Understanding of Inequity," Journal of Abnormal and Social Psychology, 67(5), 422-436.

American Dental Association, "Military and Federal Dentistry," available from <http://www.ada.org/prof/govt/dentistryworks/milfed.html>; Internet; accessed 1 November 2001.

American Dental Educational Association Fact Sheet, available from <http://www.adea.org/legislative_affairs/congressional_kit/DentEd%20Fact%20Sheet.htm >; Internet; accessed 1 November 2001.

American Medical Association: "Tax Deductions for All Student Loan Borrowers" (HR 436/S 152), available from <http://www.ama-assn.org/ama/pub/article/4044-3976.html>; Internet; accessed 1 November 2001.

Brown LJ, Lazar V. "Trends in the Dental Health Work Force". Journal of the American Dental Association 1999;130:1747.

French, Wendell L. The Personnel Management Process, Boston: Houghton Mifflin Company, 1987.

King, JE and Brunner DG, "Theater of Operations Dental Work Load Estimation". U.S. Army Health Care Studies and Clinical Investigation Activity, Final Dental Report #84-001. Fort Sam Houston, Texas, May, 1984.

Maslow Abraham H. Motivation and Personality. New York: Harper and Rowe, 1970.

Minneapolis Saint Paul Magazine: "Brace Yourself," available from <http://www.mspmag.com/feature.asp?featureID=2120>; Internet; accessed 10 December 2001.

Sculley, Patrick D. "Strategic Planning", available from <http://www.dencom.army.mil>; Internet; accessed 25 September 2001.

Shipley Richard D. "Dental Corps Structure: Past, Present, and Future". U.S. Army War College Military Studies Program Paper. AD-A 265 095, 1 April 1993.

The University of Iowa College of Dentistry: "Frequently Asked Questions about Prosthodontics," available from http://www.dentistry.vh.org/Prothodonics/faqprost.html; Internet; accessed 10 December 2001.

U S. Department of the Army (DENCOM), CDA Data, 10 January 2002.

U.S. Department of the Army (PERSCOM), Officer Master File Data, 30 September 2001.

U.S. Department of Defense, Health Affairs, Military Dentists Special Pay Study, February 1997,6.

U.S. Department of Defense, Health Affairs, Policies on Uniformity of Dental Classification System, Frequency of Periodic Dental Examinations, Active Duty Overseas Screening, and Dental Deployment Standards. Policy 98-021. Washington: 19 February 1998.

U.S. Department of Defense, The Joint Chiefs of Staff, Doctrine for Health Service Support in Joint Operations. Joint Publication 4-02, Washington: U.S. Department of the Army, 26 April 1995.